American Western Edition December 1956 TUIT Grower Tuit Grower



FIRST SHOWING!

New DODGE Power Giants

- NEW giant-power V-8 engines! NEW Forward Look styling!
- NEW higher load capacities!
- NEW push-button driving!

Get set to take the wheel of a great new kind of farm truck-with more V-8 power and more load capacity-with more eager-to-go snap than any other make on the road!

From stakes and pick-ups to heavyduty 4-wheel-drive models, today's new low-priced Dodge Power Giants give you more truck per dollar. And they're the only trucks

that offer you modern push-button automatic driving* and a full-opening hood that can be raised 90° for faster, easier engine servicing.

Test-drive a Power Giant-V-8 or 6-soon! Get your Dodge dealer's deal before you decide on your new farm truck.

Available on all low-tonnage models.

DODGE TRUCKS

WITH THE FORWARD LOOK

Stake models from 4,250 to 21,000 lbs. G.V.W.



PUSH-BUTTON TRANSMISSION

First in any truck! Simple, trouble-free. Just push a button, shifting is automatic.





Entered as second-class matter at Post Office at Willoughby, Ohio, under the Act of March 3, 1879. Additional entry at Mount Morris, Illinois



Here are a few of the many profitable applications of CAT* DIESEL TRACTORS in your orchard

This fall and early winter are good times to start developing your orchard for bigger yields next year. Illustrated here are a few of many jobs you can do now and next spring with a Cat Diesel Orchard Tractor. There's the D2 or D4 you need waiting for you at your dealer's store right now. Look it over, then arrange for a free demonstration. Prove right out in your orchard why it pays to own a Caterpillar Orchard Tractor.



Accomplish more in every season on every job with a Cat Diesel Tractor. Pull wider hitches, work deeper, make fewer passes between trees. Work smoothly, comfortably over rough ground as wide, stable tracks bridge the high spots.

FREE FARM POWER ANALYSIS

Before you plan your next season's orchard program, check with your Caterpillar Dealer. He will help you make a plan to match your needs. See him today! Ask for free booklet, "Land Clearing with Cat-built Equipment," or write Dept. AMF126, Peoria, Ill.

CATERPILLAR TRACTOR Co., Peoria, Illinois, U.S.A.



A good way to keep your labor productive the year 'round! With a Cat Diesel Tractor you can push out trees, form your land, build irrigation ditches and farm ponds.



Get your orchard off to a good start next spring by doing early jobs on time. Get the jump on bugs and mud with allseason traction, power and stability to handle big loads.

CATERPILLAR*

WORLD'S MOST USEFUL ORCHARD TRACTOR



bobbers and gobblers spark holiday sales

"Bags of VISQUEEN film specially designed for the holiday trade do much more than protect our Southwind apples. They go a long way toward stimulating sales. Milprint makes our colorful bags." R. J. Wilkie, Southwind Orchards

6 reasons why

VISQUEEN film

means better packaging at lower cost to you!

Superior strength to eliminate package breakage. Matchless uniformity for better machineability. Unexcelled ink adhesion for better printing. Economy to reduce packaging costs as much as 50%. Stiffness and body for faster filling and closing. Years of experience in producing a superior quality packaging film.

A converter of visqueen film will help you get better packaging.

Important! VISQUEEN film is all polyethylene, but not all polyethylene is VISQUEEN. Only VISQUEEN has the benefit of research and resources of

THE VISKING CORPORATION

World's largest producers of polyethylene sheeting and tubing



Plastics Division, P.O. Box 1410
Terre Haute, Indiana

IN CANADA: VISKING LIMITED, LINDSAY, ONTARIO . IN ENGLAND: BRITISH VISQUEEN LIMITED, STEVENAGE

Fruit Grower

REG. U. S. PAT. OFF.

The Only National Fruit Publication

Vol. 76 DECEMBER, 1956 No. 12

FEATURED IN THIS ISSUE

Cover photograph of chestnuts is by Gladys Dies	ing.
I'm Putting All My Eggs in One Basket!	7
Dwarf Apple Orchards in England By C. L. Burkholder	8
Speed Up Your Pruning	9
Approved Farm Stands	13
Stronger Walkboards	14

DEPARTMENTS

Letters to the Editor	5
State News	10
Fruit Pest Handbook	10
Calendar of Coming Meetings & Exhibits	12
Windfalls	18
The Berry Patch	20
The Question Box	23
New for You	. 24
Editorial Page	30

AMERICAN FRUIT GROWER

Published Monthly by

AMERICAN FRUIT GROWER PUBLISHING CO
Willoughby, Ohio

E. G. K. MEISTER, Publisher

RICHARD T. MEISTER, Editor Editorial Staff

E. K. GOULD, Managing Editor
H. B. TUKEY ELDON S. BANTA
B. M. KUBIK

GEORGE M. ROSS, Art Director
J. S. BENDER, Production Manager
EDWARD L. MEISTER, Director of Advertising
District Advertising Offices

NEW YORK, W. J. Martin and Company, 550 Fifth Ave. Phone-Plaza 7-6454

NEW JERSEY, W. J. Martin and Company, 390 Terhune Ave., Paramus.

CHICAGO, Peck and Billingslea, Inc., 185 N. Wabash. Phone—Dearborn 2-0292

SAN FRANCISCO, McDonald-Thompson, 625 Market 51. Phone—Tukon 6-0647 LOS ANGELES, McDonald-Thompson, 3727 West 6th St. Phone—Dunkirk 7-5391

SEATTLE, McDonald-Thompson, 1008 Western Ave.
Phone—Elliot 3767

HOUSTON, McDonald-Thompson, 3217 Montrose Blvd. Phone—Jackson 9-6711

DENVER, McDonald-Thompson, 222 Colorado National Bank Bldg. Phone—Keystone 4-4669

AMERICAN FRUIT GROWER is published by American Fruit Grower Publishing Co., Willoughby, Ohio. E. G. K. Meister, Publisher and Chairman of the Board, Edward L. Meister, President; Richard T. Meister, General Manager; Gilbert Meister, Vice-President. Subscription price \$1.00 per year in U.S. and possessions, to Canada and other foreign countries \$1.50. Single current copies 25c, copies over one year old 75c.

When changing your address, send us old as well as new; send the address label from your last copy; allow 5 weeks for the first copy to reach your new address.

Postmaster: Please send change of address "Form 3579" to AMERICAN FRUIT GROWER, Willoughby, Ohio.

AMERICAN FRUIT GROWER

LETTERS

TO THE EDITOR

Likes Stop-Drop Story

Dear Editor

Dear Editor:

I want to especially compliment you on the "Stop-Drop" story by Jack Batjer in the September issue. This story tells the facts, and Jack knows them. This story ought to be a big help to thousands of

Lafayette, Ind. C. L. Burkholder

Off With Their Leaves!

Dear Editor:

As an apple grower, I sure wish the re-search men and chemists would come up with a substance which could be sprayed on with a substance which could be sprayed on the trees to take off the heaviest part of leaves a week or so before picking. Even a few leaves off the top would help. This would help to color the fruit and speed up picking as well as ease labor problems. I am assuming the plant physiologists would agree the trees don't need so much leaf surface at this time of year. It might even promote hardening.

Is there such a substance in sight?

Is there such a substance in sight? Is there such a substance in sight? Wellandport, Ont. Lawrence Pogue Reader Pogue has a fine idea which has been thought about and worked upon by many even though nothing really practical has yet evolved.—Ed.

Dwarf Pear Beauties

Dear Editor:

It occurs to me that you may find usable e enclosed snapshot. The pears are the enclosed snapshot.



Duchess, a dwarf tree which bore 34 pears the third year, some weighing nearly a

The fruit is larger than and superior to the fruit from standard trees, particularly the Bartlett, and is exquisite, highly colored, and of luscious quality.

The trees were purchased from Kelly Bros. Nurseries, Inc., Dansville, N. Y. My test of dwarf trees was preparatory to a larger commercial planting in case the results proved satisfactory, which, of course, they have, refuting the statements of those who scoff at dwarfs. Of course, I realize a larger planting might require more vigilant

Trenton, N. J. Herbert R. Alger

Advice on Pickers' Tickets

Dear Editor:

I saw in the Question Box an inquiry for pickers' tickets. I use tickets from Carr Publishing Co., Boyce, Va. Just a comment—tell growers to avoid either 6 or 9. Do not use both. I speak from experience Hilton, N. Y. Ralph (Ralph G. Palmer



Concentrate Sprayer: 45,000 cubic feet of air per minute, 90 MPH. Left-hand, right-hand or two-way spraying. High-pressure, abrasive- and corrosiveresistant, 13 or 20 GPM piston pump. Easy-toreach positive controls.

Orchard Sprayers



Semi-Concentrate and Dilute Sprayer: 45,000 cubic feet of air per minute, 90 MPH. High-head, high-capacity, 120 GPM centrifugal pump. Right, left or two-side application. Remote control or spray discharge.

Deliver More A



All-Purpose Air Sprayer: 30,000 cubic feet of air per minute, 90 MPH. High-pressure, corrosiveand abrasive-resistant, 20 GPM piston pump. 36", seven-blade, high-strength cast aluminum axial-flow fan moves more air with less power. Right, left and two-way spraying.

Blower Attachment: 30,000 cubic feet of air per minute, 90 MPH. 36", seven-blade, axialflow aluminum fan. This unit converts any high-pressure sprayer to a one-man air-blast rig. One- or two-side delivery.

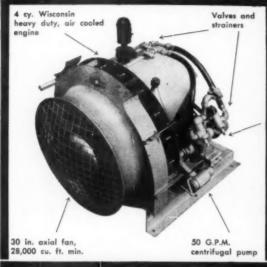
Myers Complete Sprayer Line includes

High Pressure Gun Rigs

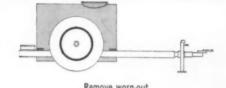


POWER SPRAYERS WATER SYSTEMS AND IRRIGATION PUMPS

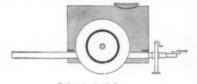
F. E. MYERS & BRO. CO., ASHLAND, OHIO . KITCHENER, ONTARIO



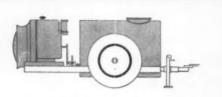








Relocate tank for better balance.



Mount Bes · Spray 'Power Package' ... paint any color you wish!

BUILD YOUR OWN AIR-BLAST SPRAYER

and SAVE HUNDREDS OF DOLLARS

with BES•SPRAY 'Power Package'

'Power Package' is a complete air-blast sprayer— (less tank and trailer)—4 cy. Wisconsin Heavy Duty air-cooled engine, 30 in. axial fan (28,000 cu. ft. min.), 50 GPM centrifugal pump, valves and strainers. It's the same fan, pump, engine, valves and strainers built for the famous Bes·Spray model 450 the past three years.

Save hundreds of dollars on your new sprayer this spring—just attach the Bes·Spray 'Power Package' to any of the following*:

- an old tank and trailer unit,
- a tank and trailer built to your specs by your local welding shop,
- an old pick-up truck, or, your own rig -- built in your barn!

Only \$1,695 f.o.b. Oakland—slightly higher from dealer and warehouse stocks in principal fruit growing areas of Midwest and East.

BESLER CORPORATION

Makers of the famous Bes·Spray, Bes·Blo Some territories still available to dealers

Bes	ler	Cor	DO	ra	tion

4053 Harlan Street • Emeryville, Oakland 8, California Send complete Information on Bes-Spray 'Power Package'

ame

Address

* Suggested design for building your own 400-gallon spray unit—at no extra cost.

AMERICAN FRUIT GROWER

Fruit Grower

· Fruit for Health ·



A Sunday afternoon crowd at Welday's Red Ridge Orchard located on a secondary road near Smithfield, Ohio. Above left—41-year-old Romes in the apple orchard.

I'M PUTTING All My Eggs IN ONE BASKET!

A prominent Ohio apple grower presents his arguments against diversified farming

By WHEELER J. WELDAY

DURING the height of the apple harvest in early October, I saw an orchard man sowing wheat in the morning, picking apples in the afternoon, and hunting up his cattle at 2 o'clock the next morning after delivering the apples 125 miles away.

This fruit grower-neighbor shares the "don't-put-all-your-eggs-in-one basket" opinion of many horticultural authorities. He believes in diversification.

As the operator of a 125-acre apple orchard at Smithfield, Ohio, I am a specialist in the fruit-growing game. All my eggs are in one basket, but I'm not worried. I've got a firm grip on the handle—because I don't have to sow wheat or chase cows or worry about anything except producing and marketing apples.

In looking at the question of diversification, three things should be kept in mind. These are 1) size of the operating unit; 2) location

in respect to sales potential; and 3) aptitude of the grower.

Size — More thought should be given to developing a competitive unit. It should be large enough for volume to justify modern laborsaving equipment, but not so large as to pass the point of diminishing returns. I feel that 100 to 125 acres of specialized apples, well-located, can be a most efficient unit, including enough young stock coming on to make the desired "rotating unit."

Location—What is the potential local market? The grower on the main highway, planning for continuous sales of various fruits throughout the season, is justified in diversifying in fruits.

Fifty acres of apples with a well-rounded "other fruits" program could mean a much larger enterprise than 125 acres of a single fruit. Diversification of this type can be profitable—providing the size is kept within bounds.

Aptitude—Fruit growing demands business ability, foresight, fortitude, and implicit regard for timing. If apples sell for as low as 75 cents a bushel, the game is to produce at 65 cents; a cost of 85 cents is fatal.

Who is in the better position to keep costs low for a given standard of quality? Surely not the tired farmer with grains, trucking, poultry, dairy, and a host of other irons in the fire who arises a little earlier and runs a little faster to care for the orchard himself in order to save costs. Watch that farmer and see if he has aptitude enough to spray for codling moth and let the corn planting go.

The apple specialist may have it easier as far as ease of operation is concerned; gears mesh better. A failure may mean more impact on the nerves—even disaster—but that is largely a question of financing.

The harvesting of a specialized apple crop is a full-sized job in itself. There are preharvest sprays to put on, poly bags to fill and market, rye to sow for small tree cover, and local sales to conduct.

Apples either pay or they don't. If they pay, it is by guts and efficiency; if not, the answer isn't in taking on those extra lines that lead inevitably toward a run-down orchardist as well as a run-down orchard.

The End.



Authenticated Never thatas Above — 32-year-old Worcester Pearmain on Mailing IX rootstock. Right—8-year-old Jonathan on MM 106, one of the new series of rootstocks resistant to woolly aphid. This tree produced crops from 1948 to 1953 totaling 172 pounds.



DWARF APPLE ORCHARDS in England

A visit to England's famous dwarf apple orchards nets some practical ideas for American growers

By C. L. BURKHOLDER

Purdue University

HEAVY early yields, lower management costs, and an increase of 28 to 32 trees per acre are possible when apple growers use semi-dwarfing rootstocks. These factors present a picture that is naturally attractive and may eventually change the entire planting program in young apple orchards in North America.

English research workers have made an intensive study of apple rootstocks. As early as 1912 Dr. R. G. Hatton of the East Malling Research Station began a study of the various rootstocks being used in European nurseries. Eventually he selected 17 of the most promising types which he then propagated by layers and topworked to a number of English apple varieties. This series of rootstocks was given Roman numerals M I to M XVII. There proved to be a wide range of dwarfing among the 17 selections. For instance, M IX produced very dwarf trees, M II semi-dwarf, and M XVI a nearly standard-size tree.

All of the original Malling rootstocks proved to be susceptible to woolly aphids, a serious production

problem at that time. Therefore, in 1928 a rootstock breeding project was initiated by Dr. Crane at the Merton Research Station and Dr. Tydeman of the East Malling Station. Most of the resulting seedlings came from crosses between Northern Spy and the original 17 Malling selections.

Out of these extensive early tests for woolly aphid resistance, 15 new rootstocks were selected, numbered 101 to 115, and given the prefix MM. These were in turn topworked to standard English varieties and are now undergoing extensive field testing. Again a wide range of dwarfing action resulted.

Five of the most promising of the MM series are described by Dr. A. P.

Preston in "Five New Apple Rootstocks." (East Malling Research Station Report, 1953, East Malling, Kent, England.)

It is estimated that 80 per cent of all the commercial orchards in England under 25 years of age are on M II, a semi-dwarfing understock. At big Norbury orchard over 300 acres of apples are grown, of which at least 90 per cent are on M II. Trees are tied to stakes during the first eight or nine years, a standard practice in England with dwarfing or semi-dwarfing understocks.

Another "dwarf" orchard in southeastern England is operated by Tom Neame and his two sons. In addition

(Continued on page 19)







Fruit grower Paul Kimball, of Worcester County, Mass., (left) trims his apple trees the easy way with a Mall electric chain saw and a portable war surplus generator mounted to the rear of his tractor. The saw is equipped with a frigger switch for complete safety. When Kimball loosens his grip on the saw. It stops, enabling him to climb ladders and maneuver among

branches, It weighs 14 pounds, costs about \$125. Kimball tests saw (above) before climbing lader. Gosoline generator weighing 150 pounds is mounted on home-made stand at rear of tractor between drawbar and axle. When not in use, generator sildes off for easy storage. Note 100 feet of cable wound on platform to enable working several trees without moving tractor.

Speed Up Your PRUNING

These growers get their pruning job done quickly and easily by using time- and labor-saving methods





Everett Eaton, foreman at Applecrest Orchards, Rockingham County, N. H., doesn't waste time getting pruning equipment together. His home made pruning trailer (left) is complete with compressor (powered from tractor power take-off), three power pruners with hoses coiled on a spindle, and other necessary pruning tools. Tools are protected in the big wooden box on the trailer. Tacked on the Inside IId of the box (above) is a drawing (protected by a plastic covering) of a properly pruned apple tree so quick instructions can be given inexperienced workers on how to prune.—Chas. L. Stratton.



Converting tree prunings to chips in the orchard saves labor, and the chips condition the soil. Chip mulches last longer than other kinds of mulches and don't favor insects and redents, reports the USDA. Chipper shown obove is made by Fitchburg Engineering Corp., Fitchburg, Mass.



Photos above and at right courtesy Soil Conservation Service, USDA.

Wood chip mulch on young raspberry plantation on William Wollerton farm, Rhinebeck, N, H. USDA Soil Conservation Service Leaflet No. 323, Wood Chips for the Land, is available for 5 cents from Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.



Block of 12-year-old McIntosh, Cortland, and Delicious apple trees in R. H. and R. M. Lovejoy orchard, Acton, Maine, mulched with four bales of wood shavings per tree. Fruit growers find that wood mulches increase yields and size of fruit. Injury to "drops" is also reduced.

DECEMBER, 1956

g,

of son k. 00 at es st

n

state (NEWS

- Michigan Growers Look to 1957 with Enthusiasm
- New Jersey Reports Heavy Drop of Apples

Hopes High for 1957

MICHIGAN-With the production season of 1956 completed, growers are looking to 1957 with a great deal of expectation. The apple crop, estimated between 10 and 11 million bushels, was very favorable. Color and quality were excellent. However, the dry weather in the central and southern counties of Michigan reduced fruit size on trees with a heavy crop. Many growers who felt they had removed all the fruit of cer-tain varieties with a thinning spray of NAA were pleased to observe good crops on these trees in spite of the early observations of no fruit.

Three new controlled atmosphere storages were put into operation this fall on the farms of Erwin Klenk and William Schaeffer in Sparta and Vernon Bull in Casnovia. More storages of this type are being planned by growers for construction in 1957.

Peach growers are particularly interested in the new red-skinned Haven varieties of peaches, the Sunhaven and Richhaven, recently introduced by Stanley Johnston, superintendent of the South Haven Experiment Station. Also, the longer-established variety, Redskin, is creating a great deal of interest as this variety brought a premium price this year on the Benton Harbor market over the yellow and blushed varieties. The Sunhaven and Richhaven varieties released in 1955 are not yet in commercial production.—Arthur E. Mitchell, Asst. Sec'y, East Lansing.

Cross Retires; White to Take Over

OKLAHOMA-After 38 years of service at Oklahoma A & M, Dr. Frank Cross

retired recently as head of the horticulture department.

Dr. Cross is a pioneer in a nationwide research program on uneven ripening in grapes, in addition to being a leader in the teaching field. He has served as secretary-treas-urer of the Federated Pecan Growers Association.

Dr. David G. White, Penn State horticulturist with a distinguished record in both the United States guisned record in both the United States and abroad, will head the Oklahoma horticulture department after the first of the year. He is a native of Parsons, Kans.—

Ab Lemmert.

Heavy Apple Drop

NEW JERSEY-Apple drop was heavy during the last week of October, resembling 1942 in this respect. Warm temperatures following the mid-October freeze re-sulted in some leaf drop and subsequent drop.

Magnesium deficiency symptoms in apple orchards were more prevalent than in previous years, particularly on Rome.—Ernest G. Christ, Sec'y, New Brunswick.

IKE LIKES APPLES!

IKE LIKES APPLES!

Could it be that apples affected the election?

Mrs. Elsenhower gave the President a box of Golden Delicious for his birthday. (We have it on good evidence that the apples were grown in Maryland.) Perhaps they had some effect, for there were some mighty fine speeches made after those birthday apples were presented.—A. F. Vierheller, Sec'y, Maryland State Horticultural Society, Ceilege Park.

Big Crop

INDIANA-Growers have just finished picking one of the largest crops in recent history. Entire crops were harvested without danger of freeze.

Displays of apples in polyethylene bags were exhibited at the Indiana State Fair this year for the first time.

In keeping with the newer marketing trends, the fair opened two sections for apple growers this year. A first place prize of \$10 was offered for the best entry of any red variety displayed in three 4-pound film bags. Similar money was offered for the best yellow variety displayed in the same manner. In addition, the fair offered

a sweepstakes prize of \$5.

Winner of the sweepstakes was A. Calglazier and Sons, growers from Salem.
Their apples were the smoothest, best

formed Golden Delicious the writer has

D. B. Colyer, of Mobleville and Frankport, fruit grower and farmer, passed away suddenly while visiting his son in California. George A. Adrian, Sec'y, Indianapolis.

CONNECTICUT-In spite of lack of water, a nice crop of apples with high color and quality has been harvested.

Robert Josephy, Blue Jay Orchards, Bethel, is a local grower who deserves a pat on the back. He runs his up-to-date cider press at top capacity in connection with his roadside stand. Quality products in clean, attractive surroundings pay off, and Bob is a perfect example of the success of this principle.

George S. Butler, Cromwell, last of the honorary life members, and a charter mem-ber of the Connecticut Pomological Soci-ety, died recently. He was the first secreof the organization, in 1891.

The Connecticut Pomological Society lost another old member with the recent death of M. W. Force, East Haddam.—
Sherman P. Hollister, Sec'y, Storrs.

(Continued on page 12)

FRUIT PEST HANDBOOK

(FIFTY-FIFTH OF A SERIES)

PEAR OR CHERRY SLUG

THE pear or cherry slug is a common pest of pears and cherries and an occasional pest of plums throughout the United States. Injury is due to skeletonizing of the leaves by the feeding of the larvae on the upper surface. Only a network of veins and the lower epidermis remain on badly damaged leaves.

leaves.

The insect overwinters as a pupa in an earthen cell in the soil. The adults—small, glossy black, four-winged flies—appearate in the spring. The eggs are laid soon after in the leaf tissue where they hatch in one to two weeks.

The larvae are enlarged in front and toper behind, are slimy and sluglike in appearance, are yellow to arange when first molted but soon appear alive green to almost black in color due to the slime, and are about one-half inch long when full grown.

The slugs feed and complete their growth in about a month, drop to the ground, and enter the soil to complete development into adults. A second brood appears commonly during late July and August, feeds until full grown, drops to the ground, and enters the soil for the winter.

Control The results sorres schedule are

enters the soil for the winter.

Control. The regular spray schedule ordinarily controls the pear or cherry slug. If it does not, or a regular spray program is not followed, spray the trees with lead arsenate at 2 pounds per 100 gallons of water when the slugs are first noticed on the leaves. If it is closer than 30 days to harvest when you notice the slugs, use a retenane spray containing 2 pounds of a 4% or 5% rotenane wettable powder per 100 gallons or dust the trees with a 0.75% rotenane dust. A second application may be



Larva of pear slug feeding on pear leaf. Photograph courtesy USDA.

needed when the second brood appears. Howard Baker, USDA.

FOR BAGS THAT HAVE THE

toughness

THAT SATISFIES ... AND SELLS!



Polyethylene film bags are the people's choice! And the deciding factor continues to be the wonderfully tear-resistant toughness of the film.

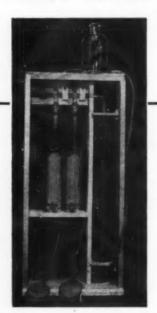
You will get the film toughness that satisfies shoppers, packers, and store managers, when the bags you buy are made with film formulated from the special tough resins developed by Monsanto research for packaging applications.

When you next order polyethylene film bags, specify "Monsanto grade toughness." We'll be glad to give you the names of bag manufacturers who can supply your needs. Write to Monsanto Chemical Company, Plastics Division, Room 1372, Springfield 2, Massachusetts.

DECEMBER, 1956



- **▶ LEAK-PROOF**
- ACCURATE
- **EASY TO USE**



"SGA" ORSAT GAS ANALYZER

APPLES cannot remain fresh and delicious tasting during the entire storage period unless the atmosphere is properly controlled. That's why it is so important to use the right kind of apparatus for analyzing carbon dioxide and oxygen in controlled atmosphere storage.

The "SGA" Orsat Gas Analyzer is recommended by Dr. R. M. Smock of Cornell University in his Handbook For Controlled Atmosphere Rooms because "it is more likely to be leak-proof." The "Pyrex" brand glass apparatus is housed in a portable wooden carrying case for accurate, on-the-spot determinations.

> Write today for complete information!

J-1958 Orsat Apparatus complete, as illustrated, including rubber bulb for pressure or vacuum. Price.....\$75.00



STATE NEWS

(Continued from page 10)

Quality Not Quantity

IOWA—Apple production was below average but some fine quality fruit was produced. Prices averaged slightly higher than last year. Practically all good quality apples have been sold.

Much needed rain has been falling (Oct. 6), and there have been no early freezing temperatures.—R. Glenn Raines, Sec'y, Des Moines.

SERVES INDIANA AND ILLINOIS

SERVES INDIANA
Now servicing the
states of Indiana and
Illinois for Michigan
Orchard Supply Company, South Haven, is
Roger Van Leeuwen, a
graduate of Michigan
State University. He
will represent the
complete MOS line of
fruit and vegetable
graders. AUTO-LOCK



complete MOS line of fruit and vegetable graders, AUTO-LOCK Irrigation equipment.
U-T lift trucks, Friend sprayers, Rose Trehoes, prepackaging equipment, and other specialty orchard and row-crop equipment. Practical farming experience was gained by Von Leeuwen during several years of managing and operating the Van Leeuwen family farm.

Annual Meeting Plans

KANSAS—W. D. Armstrong, University of Kentucky, will be guest speaker at the annual meeting of Kansas State Horticultural Society, December 13-14, at Manhattan. He will discuss growing straw-berries and peaches. The panel on irrigation promises to be a highlight of the program, and the 1956 investigations at the experiment station will be another top feature. The attorney for the State Board of Agriculture will discuss the legal aspects of the use of 2,4-D.

James Sharpe, of Council Grove, veteran fruit grower and longtime member of the Kansas State Horticultural Society, and well known throughout the state, passed away recently.—William G. Amstein, Sec'y,

FUNGICIDE RESULTS PUBLISHED

"Results of 1955 Fungicide Tests," reprinted from a series of articles appearing in Agricultural Chemicals, may be purchased for \$3.00 per bound capy from Dr. A. G. Newhall, Dept. of Plant Pathology, College of Agriculture, Carnell University, Ithaca, N.Y. The publication of these results is under the sponsorable of the American Phytopathological Society.

Recognition

WISCONSIN—Two fruit growers were honored for outstanding services at the 88th annual convention of Wisconsin State Horticultural Society, held at Fond du

R. L. Marken, Kenosha, a University of Wisconsin graduate in horticulture, a past president and director of the Wisconsin State Horticultural Society, and an outstanding leader in orcharding was recog-nized "for devotion to the successful cul-ture of fruit and substantial contributions to advancing the art of fruit growing and the welfare of horticultural organizations. Mr. Marken is a partner in the Thompson

and Marken Orchards at Kenosha.

Arnold F. Nieman, Cedarburg, a past president of the horticultural society, past secretary of the Wisconsin Apple Institute, an officer of the Ozaukee County Fruit Growers Association, and prominent civic and community worker, was recognized

(Continued on page 28)

CALENDAR OF COMING MEETINGS & EXHIBITS

Dec. 3-5—New Jersey State Horticultural Society annual meeting, Atlantic City.—Ernest G. Christ, Sec'y, New Brunswick.

Dec. 3-5—Kentucky State Horticultural Socie-ty 100th anniversary meeting, with American Pomological Society co-operating, Brown Hotel, Louisville.—W. W. Magill, Sec'y, U. of Kentucky, Lexington.

Dec. 4-5—Oklahoma Pecan Growers Association annual show and convention, Ardmore.— E. L. Whitehead, Sec'y-Treas., Stillwater.

Dec. 4-6—Michigan State Horticultural Society annual meeting, Civic Auditorium, Grand Rap-ids.—A. E. Mitchell, Asst. See'y, Michigan State U., East Lansing.

Dec. 6-7—Tennessee State Horticultural Society 51st annual convention, Andrew Jackson Hotel, Nashville,—A. N. Pratt, See'y, 408 State Office Bldg., Nashville.

Dec. 6-7—Oregon State Horticultural Society Ist annual meeting, Oregon State College, Cor-callis.—C. O. Rawlings, Sec'y, Corvallis.

Dec. 7.—Tennessee Pesticide Institute organization meeting, Andrew Jackson Hotel, Nashville.—A. N. Pratt, 403 State Office Bldg., Nashville.

Dec. 7-8—Idaho State Horticultural Society 62nd annual meeting, Hotel Boise, Poise.—An-ton Horn, Sec'y-Treas., Boise.

Dec. 10-12—Washington State Horticultural Association 52nd annual meeting, Yakima.— John C. Snyder, See'y, Pullman.

Dec. 11-12—Connecticut Pomological Society 66th annual meeting, Hotel Bond, Hartford.— Sherman P. Hollister, See'y, Storrs.

Dec. 11-12—Peninsula Horticultural Society annual meeting, Capitol Grange Hall, Dover, Del.—Robert F. Stevens, Sec'y, Newark.

Dec. 13-14-Kansas State Horticultural Society nnual meeting, Manhattan,-W. G. Amstein, annual meeting, Sec'y, Manhattan.

Dec. 14-15—Western Colorado Horticultural Society annual meeting, Mesa College, Grand Junction.—Raleigh B. Flanders, Sec'y, Box 478, Grand Junction.

Dec. 14-15—Utah State Horticultural Society annual convention, Hotel Utah, Salt Lake City. —Anson Call, Sec'y, Logan.

Jan. 3-4, 1957—Maryland State Horticultural Society annual winter meeting, Hotel Alexander, Hagerstown.—A. F. Vierheller, Sec'y, College Park.

Jan. 3-4—Missouri State Horticultural Society 99th annual meeting, Daniel Boone Hotel, Colum-bia.—W. R. Martin, Jr., Sec'y, U. of Missouri, Columbia.

Jan. 8-9—North Carolina State Apple Growers Association, annual meeting, Hendersonville.—Melvin H. Kolbe, U. of North Carolina, Raleigh.

Jan. 8-18—Massachusetts Fruit Growers' Association annual meeting, Worcester—A. P. French, Sec'y, Amherst.

Jan. 18-12—Northeastern Weed Control Conference, 11th annual meeting, Sheraton-McAlpin Hotel, New York City.—E. M. Rahn, Chairman, Public Relations Committee, Dept. of Hort.

Jan. 14-16—Virginia State Horticultural So-ety 61st annual meeting.—John Watson, Sec'y, O. Box 718, Staunton.

Jan. 17-18—Fruit and vegetable growers short course on marketing, soil fertility, and insect control. New Mexico A & M College, State Col-lege.—T. E. Raynor, 1801 Bellamah Dr., Las

Jan. 21-26—New Jersey Farmers Week, Trenton.—Fred W. Jackson, Dir., Div. of Information, Dept. of Agriculture, Trenton 25.

Jan. 22-24—Indiana Horticultural Society 96th nnual meeting, Severin Hotel, Indianapolis.— eorge A. Adrian, RR 4, Box 54-M, Indianapolis.

New York State Horticultural Society winter leetings: Jan. 23-25—Rochester; Jan. 30-Feb. 1 Kingston.—D. M. Dalrymple, Sec'y, Lockport.

Jan. 28-36—Pennsylvania State Horticultural Association annual meeting, Yorktowne Hotel, York.—John U. Ruef, Sec'y, University Park.

Jan. 28-31—United Fresh Fruit & Vegetable Association, Benjamin Franklin Hotel, Philadel-phia.—Association headquarters: 777 14th St., N.W., Washington, D.C.

Feb. 6-8-Ohio State Horticultural Society annual meeting, Netherland-Hilton Hotel, Cin-cinnati.—C. W. Ellenwood, Sec'y, Wooster.



A. P. French, secretary of the Massachusetts Fruit Growers' Association, delivers the Ap-proved Farm Stand sign to C. A. Dowse, Jr., of Sherborn, whose stand was first one approved.

APPROVED FARM STANDS

Massachusetts growers begin program to certify roadside markets

HE Massachusetts Fruit Growers' Association has initiated an "Approved Farm Stand" program aimed at increasing consumer confidence in local-grown fruit and other produce sold at farm stands.

Growers whose stands meet the standards of the Code of Ethics are given the right to display the "Approved Farm Stand" sign. It is 18 x 24 inches, metal, and printed on both sides with white background and three colors-green lettering, red apples, and wood-toned basket.

Several inspections are made during the season to make sure that the operator is maintaining code standards .- A. P. French, U. of Mass.

CODE OF ETHICS FOR APPROVED

FARM STANDS

To all customers:
The undersigned has agreed to operate this roadside stand or farm sales room in accordance with the following Code of Ethics:

in accordance with the following Code of Ethics:

1. To maintain the stand, stand surroundings, and signs to present a near and attractive appearance.

2. To feature local items, with at least 60% of items sold to be produced by stand operator.

3. To display only products in good, firm, usable condition.

4. To use any grade mark on all products whenever official grades are available for the product, and to have the product under a grade mark qualify under the grade indicated.

5. To appear the grade indicated.

6. To pack all containers with at least the weight or volume common for the package, and to have the face of each package represent the contents of the package.

7. To have the name and address of the operator on or in each container, the package of the package.

9. To state the variety and grade when advertising price in newspapers or on the radio whenever official grades are available.

10. To treat all customers with courtesy and consideration favorable to the development of a good reputation for the Approved Farm Stand sign.

11. To display the APPROVED FARM STAND CODE OF ETHICS in a prominent place in the stand at all times.



INCREASED CAPACITIES - For 1957, capacities have been increased In John Bean Speed Sprayers to assure you greater "rate of work" performance than ever before. This means greater speed and economy in doing the effective spraying job you need in your particular orchard. You get the deepest, most uniform penetration possible, using either concentrate or dilute applications. The exclusive John Bean air handling design permits you to gain all the advantages of high volume, low velocity air flow . . . controlled to fit your trees, under your specific spraying conditions.

A COMPLETE LINE - From the recognized leader of all orchard sprayers, the Model 40F Speed Sprayer, through the brand new Model 26F shown above, to the rugged Speedaire attachments, this 1957 John Bean line offers you the most complete selection in the field. You're sure to find a

John Bean Orchard Sprayer suited exactly "What You Should Know About AIR-CARRIER John Bean Dealer now for a demonstration in your own grove or orchard.

SPRAYING OF ORCHARDS" Write today for your illustrated copy.





THE COMPLETE ORCHARD SPRAYER LINE



LANSING 4, MICHIGAN SAN JOSE, CALIFORNIA Division of Food Machinery and Chemical Corporation

Advanced WD-45 design means

MORE EFFICIENT ORCHARD POWER



Here is tractor and implement engineering that offers you a new combination of power and maneuverability . . . economy and convenience . . . for many orchard operations, as well as for general farm work.

You'll be surprised at the many operating advantages provided by the WD-45 Tractor and the great new Allis-Chalmers implements. Your choice of dynamic Allis-Chalmers gasoline, LP gas or diesel engines, in conjunction with the automatic Traction Booster system, works with amazing efficiency—cutting operating costs and getting more work done faster. Power steering is optional.

The 4-plow WD-45 Tractor will make money for you on every job it tackles. It's the new measure for efficient power . . . on more farms and ranches every day.

It's easy to own a WD-45. See your Allis-Chalmers dealer today!

ALLIS-CHALMERS, FARM EQUIPMENT DIVISION, MILWAUKEE 1, WISCONSIN

ALLIS-CHALMERS



TRACTION BOOSTER is an Allis-Chalmers trademark.



Two-level pruning platform built by Phil Johnson, Mooresville, Ind., is mounted over tractor. A 20 cubic foot compressor works off power take-off which operates four pneumatic pruners.

STRONGER WALKBOARDS

Here are ideas on constructing walkboards for pruning platforms

M ANY growers report that the walkboards, or slip planks, of their pruning platforms are too "springy." Yet if they try to use a more rigid material such as metal or heavy planks, the walkboards are too heavy to be handled manually. What is needed, says fruit grower Mark Byers, of Vincennes, Ind., is a lightweight, yet rigid walkboard.

California growers have had the same problem with walkboards. R. R. Parks, extension agricultural engineer at the University of California, says, "Their stiffness is inadequate even when you try to use only half their length protruding from the platform."

Parks suggests using West Coast douglas fir for walkboards because it stands up very well by comparison with other woods. Spruce is also good, he says.

Straight grain spruce is used by Washington growers, says Archie Van Doren, superintendent of the



Hoist for pruning built by grower Ken Jimeson, Malott, Wash., is mounted to front of His jeep.

AMERICAN FRUIT GROWER

Tree Fruit Experiment Station, Wenatchee. Where this wood is unavailable, he suggests a painter's ladder board which is obtainable in aluminum rigid trussed construction in a fairly thin, plank-like walk.

He also suggests, as a possibility, marine glued plywood, laminated and bolted. For safety, the boards should have carborundum or garnet paper glued on the surface, similar to that used on airplane step-plates.

At Cornell University, reports Everett Markwardt, extension agricultural engineer, the best material for walkboards has proved to be five 2 x 4's placed on edge and separated by 1-inch blocks.

"Turning the 2 x 4's on edge gives a stronger, more rigid platform than a heavy plank," says Markwardt. "One also has quite good footing



Photo by John Staby

A PRUNING PROBLEM

A PRINTING PROBLEM
Does the sight of this Cortiand apple tree
make you hanker for your clippers? If so,
reach for a pencil instead. Trace over the
branches you'd leave on the tree if you
were the pruner. Then compare your job
with that done by the man who actually
pruned this tree at Pomona Fruit Farm,
Appleton, N.Y. "After" picture on page 28.

because of the space between the boards.

The boards can be 10 feet long if made from good, clear material free from knots. If 11- or 12-foot walkboards are desired, six 2 x 4's of the best-grade wood should be used. Although hemlock might hold, West Coast douglas fir is preferable.

Plans for a pruning platform with walkboards such as this are contained in Agricultural Engineering Mimeo #845, available from the Extension Service, Cornell University, Roberts Hall, Ithaca, N.Y. This mimeo also discusses the effect of power pruners and pruning platforms on the cost of pruning apple trees in New York. THE END.



Brillion's armored Cyclone of Steel shreds finer, first time over

No pins to shear, no belts to slip

Put the new Brillion Cut-All Shredder to work in your orchards—you'll find it ideal for any shredding job. Chews up even heaviest prunings...

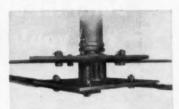
shreds finer, first time over. And it's just as handy for clipping grass too.

Two sets of heavy-duty double blades, enclosed in \(\frac{\partial_0}{16} \) steel plate, easily shred prunings up to 3 inches in diameter. Exclusive friction slipclutches safely harness full tractor PTO power. No belts to slip, no pins to break.

The offset model with swinging drawbar is tops for any type of or-chard shredding. 1. Use in direct pull position for shredding between rows. 2. Or offset the hitch and ride free from branches as you clip close

to trees.

The Brillion shredder is available as the offset model with swinging drawbar, the Cut-All with straight pull type hitch, or the pick-up model shown above. See your Brillion dealer for complete information or mail the coupon below.



AS EASY ON YOUR TRACTOR AS A PTO MOWER

Exclusive double slip-clutches above and below each set of blades cushion sudden jolts of tough shredding obs. When obstruction stops bottom blades, top set keeps running. Gives self-cleaning action.

Brillion CUT-ALL SHREDDERS

IT, IT MUST BE GOOD BRILLION MAKES



HEAVY ORCHARD PRUNINGS ... Cut-All Shredder starts to work on abnormally heavy prunings left by a hurricane. Prun-ings measured up to 6 inches in diameter. HERE ARE THE RESULTS ... the ground covered with short, fine, fluffy shreddings. Shredder has made two trips over the right half of the row.

Clip and	mail to Brillion Iron Works, Inc., Dept. RS-25-12, Brillion, Wisconsin. Send me complete information on the Brillion Cut-All Shredders.
Name	
Route or St	reet Number
Town	State

CRAG GIOGIN

Don't let SCAB rob you!

Get clean fruit with CRAG Glyodin

"CRAG" IS A REGISTERED TRADE-MARK OF UNION CARBIDE AND CARBON CORPORATION

No other scab spray gives you so many profitable advantages at such low cost...

You can quickly see why Crac Glyodin is so popular as a scab spray among so many leading fruit growers. It costs only 75ϕ per 100 gallons of early spray and 54ϕ per 100 gallons of cover spray. At this low cost, you get many money-making advantages:

- Controls Apple Scab: In early sprays and cover sprays, low-cost Crag Glyodin is powerful protection against apple scab and also makes a perfect combination with the mercuries for "back-action" eradication of scab.
- Controls Other Diseases: CRAG Glyodin controls summer diseases such as sooty blotch, bitter rot, Brooks spot, fly speck, and black rot. Also controls leaf spot on sour cherries and brown rot of peaches interplanted with apples.
- Saves Mite Sprays: CRAG Glyodin suppresses red mite build-up, frequently saving the cost of special mite sprays. Growers also report suppression of two-spotted mite by Glyodin in cover sprays.
- Covers and Sticks: No stickers or spreaders are needed with CRAG Glyodin. It covers foliage and fruit with uniform protection that stays on through rainy periods.
- Easy to Use: CRAG Glyodin is a liquid that dissolves quickly even in cold water. It saves loading time, never clogs spray nozzles, leaves no sediment in the tank.
- Fine Color and Finish: CRAG Glyodin leaves no undesirable residue to reduce leaf efficiency or discolor fruit. It can be used up to day of harvest to prevent pinpoint scab in storage.
- Increases Effectiveness of some Insecticides: Some commonly used insecticides may tend to be more effective with Glyodin than in combination with other commonly used fungicides.

Plan now to get the high efficiency and great economy of CRAG Glyodin. See your supplier . . . or write for full information.

CARBIDE AND CARBON CHEMICALS COMPANY

A Division of Union Carbide and Carbon Corporation

30 East 42nd Street III New York 17, New York





ROCKET LOPPERS **CUT COSTS**

ROCKET loppers - America's finest-let you work faster with less fatigue, save you time and money.

That's because they're perfectly balanced and light in weight. Tubular steel handles and cushion grips soak up arm shock, avoid blisters. Heattreated cutlery steel blade clips off limbs clean, quick.

Chrome-plated shafts are extra strong, won't break or set. Perforated grips won't slip when wet or in gloved hand.

See all three models at your hardware or garden supply store. No. A105 (above) for general use but specifically for citrus trees. No. A103 for heavyduty orchard work. No. A101, a new, smaller lopper. Perfect for vineyards. Shock-absorbing rubber bumper. True Temper Corp., Cleveland 15, Ohio.



and farm tools . Shovels . Hammers, axes, hatchets · Fishing tackle · Golf-club shafts



By HENRY BAILEY STEVENS

SOME of the big differ-Across the ences that strike a New Divide Englander coming into

the Far West are: 1) the complete dependence of the crops upon irrigation: 2) the fewer number of sprays necessary in the dry climate; 3) the enormous concentration of volume in individual units and regions; 4) the greater amount of co-operation in commodity organization; and 5) the increased tempo of highway driving.

Where Do You Get Pickers?

THEY were giving the bunk-houses a fresh coat of paint when I visited my

friend's orchard overlooking Lake Chelan in the state of Washington. The Delicious showed a tinge of color. It was time to ready up for the harvest.

"Where do you get your pickers?" asked. Houses were few among the miles of orchards all around.

"All sorts of places. The backbone of the crew are regulars-people who come back year after year, who like to pick apples and do well at it. They make good pay and are surer of their money than the guy who runs the orchard. A lot of them are migrants.

There are long stretches of railroad track in Wenatchee; and when apples are ripe, it seems that many passengers roll in by freight-without benefit of ticket.

They come as birds come northat the appointed time and to the same place. They have their little jungle - a spot under the bridge, where they can build a fire and boil a pot of coffee. We go there with a truck early in the morning. 'Come on, fellers, why not have a real breakfast?' They know us, and we remember a number of them.

"Some of them play it cagey and want to spell out the details. We tell them the whole story: the price we will pay per box, the bonus if they stick through the picking season, the charge for their meals, the rules and the limits on 'recreation.' But most important of all is the assurance: 'You know, fellers, Gene is counting on you to pick those apples.' A regular always rises to the occasion at this point: 'I know. I promised Gene last fall I'd come back, and here I am.

"They pile into the truck, and we're off for Chelan.

"We do our best to keep absolute faith with them. Clara gives them good meals and all they want to eat, plenty of seconds. It takes a day or two usually to feed them up to the point where they're good for much. They think the world of Clara. You know from one year to the next some of those fellers maybe don't get a chance to talk to a respectable woman. If any new man starts to be fresh, they take care of him.

"Basil overheard two of them at the end of the season figuring up their assets for the winter: one had \$100, the other \$104. It was agreed that the former could take care of food and lodging for the months ahead; the more prosperous one would stock the wine.

"We drive them down to Wenatchee Saturday afternoons. They can shop, go to a movie, or do what they like. Some of them get drunk, but they understand they can't bring the stuff back with them. A few of them don't come back. One of them follows the practice of leaving an extra \$20 with the liquor store to pay his fine if he gets into jail.'

Address your "Windfalls" contributions to Henry Bailey Stevens, American Fruit Grower, Willoughby, Ohio.

DWARF TREES

(Continued from page 8)

to 200 acres of apples, pears and cherries at the home farm, they have a 150-acre planting of apples at a nearby hill location where the rows are over a half-mile long.

This entire planting of permanent trees was on M II with very dwarfing M IX trees used as fillers in a part of the planting. The standard planting distance was $25\frac{1}{2} \times 25\frac{1}{2}$, calling for 67 trees to the acre. The uniform size of trees and the evident ease of spraying and harvesting in this 10year-old block are impressive.

Growing conditions in England vary from those in the United States and Canada. The average yearly rainfall of about 26 inches is evenly distributed over the 12 months, and there is less trouble from extreme drought periods during the growing season. There are approximately 35 less

growing days, much fewer hours of bright sunlight, but above all. English growers have no worries over possible sub-zero temperatures in November which we experience all too frequently before the leaves are all off.

Says Dr. A. P. Preston, of the East Malling Station, "Naturally vigorous varieties should go on the semidwarfing rootstocks, while moderately thirfty varieties will do best on the

more vigorous stocks."

An example of this idea was a block of 36-year old trees of Bramley (one of the most vigorous English varieties) which had been topworked on M VII. These trees were not as large as 20-year-old Grimes in the United States. It seems to me that we would profit by further testing of each of our apple varieties on the M and MM rootstocks under our varied climatic conditions. THE END.

EAST MALLING REPORT

THE 1955 Annual Report of the East Malling Research Station, at Kent, England, has just been published and is available to growers in the United States for \$2.00 plus over-

seas postage.

More than half of the 162-page journal contains research papers and bulletins for growers on a wide range of subjects, including fruit thinning, virus-free fruit tree and strawberry production, cover crops and soil moisture, and insect and disease control. The full text of the Amos Memorial Lecture on fruit nutrition by Prof. T. Wallace is a special feature.

For a copy, write to the Secretary, East Malling Research Station, Maid-

stone, Kent, England.



Praise like this, coming from a man who knows and has owned other sprayers, can only be earned on the job — right in the orchard! And it is typical of what many other owners of Cardox Aqua-Jet Sprayers have testified about Cardox performance and superior re-

Before you buy any sprayer, decide that you want the best performance and economy you've ever known. See your Cardox Dealer now — and be in tip-top shape for better crops and lower costs next season!



AQUA-JET HEADS

CARDOX	CORPORATION	· Cleveland, Ohio	Oakland, Ca
07 N. Michigan Avenue	Chicago 1, Illinois	13233 Euclid Ave.	1118 Fifth A

CARDOX CORPORATION 307 N. Michigan Avenue, Chicago 1, III. Dept. AF-12
Name
Street or RFD No.
CityState

MODERN

EQUIPMENT

Like the one horse shay and the Model T the "chain sizer" and "hand dumper" have been replaced with modern Trescott equipment.

Save Space. Eliminate Bruising. Increase speed by replacing your old chain sizer with a

RAPID SIZER

Pace Your Fruit Line. Save Labor and Bruises with the fast gentle

AUTO DUMP

Trescott developed the Tilting Chute for Potatoes. For bagging apples use the level Autobagger and slow fall apple head

BRUISELESS AUTOBAGGER

Dependable Bag Closers, Vacuum Bag Lifters, Takeaway Belts and Master Container Packers.





BEFORE YOU BUY ---

COMPARE - Gorman-Rupp pumps with all other makes and their performance under field conditions . . .

EXCLUSIVE! - Gorman-Rupp Firsts! . . .

- * CHECK VALVE (lever control) Standard equipment on pump discharge. No gate valve needed. Valve threaded to receive 6" pipe.
- * WEAR RING Renewable, surrounds impeller
- * SHAFT SEAL Located on suction side under vacuum. Lubricated by compression grease
- ★ END PLATE Removable, gives easy accessibility to impeller and shaft seal without disturbing pipe connections.

And! with Gorman-Rupp you get a complete irrigation pump package: pump, engine, exhaust priming device, strainer -ready to work.

Available in many sizes.
Air-cooled engines and water-cooled engines.
GPM varies with lbs.
Pressure. Ratings from 80 GPM at 75 lbs. to 1250 GPM at 125 lbs., or 3000 GPM at 35-foot head.

GORMAN-RUPP IRRIGATION PUMPS

GORMAN-RUPP ORIGINATES - OTHERS IMITATE

THE GORMAN-RUPP COMPANY . MANSFIELD, OHIO



FALLS. NEW YORK

WE are not many months from the 1957 nursery catalog, and about now we get the irresistible urge to look ahead and plan for the next planting of strawberries. How much attention should we give to the new set of terms which will dwell on freedom from virus and nematodes in the planting stock we are planning to buy. How is such "freedom" determined?

It will be safe and wise to adopt the attitude that any strawberry plants not produced from virus-free stock are not worthy of space in your new setting. This might knock out a favorite of yours, but most of the standard varieties are now obtainable, virus-free to a dependable

degree.

Do not be coaxed into thinking that strawberry plants stay virus-free indefinitely. They do not—and the continuous production of even substantially virus-free strawberry plants, year after year, is not the accomplishment of the energetic amateur. It takes all the skill and scientific training of the professional plantman to bat anywhere near 10001

Nematode Control Difficult

A more difficult checkpoint will be the nematode situation. Unfortunately, nematodes leave tracks visible only to the trained eye and their control is easier said than done. It is important for you to know what nematode control your plantman is practicing. If he has no program to offer, you are justified in consider-ing a source of planting stock where such a program is vigorously carried out.

And do not be persuaded that your own land perhaps is already infested with nematodes, so why worry about nematodes in the plants. Two wrongs do not make a right. You have the right to go out for the best planting stock, since nematode control in nursery beds is now being widely practiced.

At present, your knowledge of the ethics of your plantman will be your best guide in evaluating the claims on freedom from virus and nematodes .- Robin Wyld.

AMERICAN FRUIT GROWER



PRUNING BLUEBERRY PLANTS These photos show an unpruned blueberry plant (above) and the same plant after pruning. Pruning of established blueberry plants con-sists mainly of removing bushy, thin wood.



PRUNING GRAPES

HASTE can make waste in grape pruning, warns Dr. Nelson Shaulis, Cornell grape specialist, if the thermometer drops low enough to cause winter injury to the vines.

Three years' experiments in New York indicate that fall-pruned grapes may suffer from winter injury if temperatures drop to 18° below zero. he said. Injury can be even more severe on tender varieties such as Delaware and Duchess

In milder winters, with a minimum of 10 below zero, there was no difference in cold hardiness between springpruned and fall-pruned vines.

"There is something to be gained in waiting to start pruning until after the first hard freeze," he said. "This makes cane selection easier because immature canes will be frozen and withered."



BUILD FOR THE FUTURE with STARK Record-Bearing Strain FRUIT TREES

Stark Bro's "Record-Bearing" Strains of the world's most popular and most profitable fruit varieties are the best insurance of "Success" a planter can buy yet these finest trees cost little, if any, more than ordinary trees propagated from scions promiscuously cut from unknown parents.

Genuine Trees of these LEADER APPLES and PEACHES and New Introduc-tions are Obtainable ONLY from Stark Bro's:—

APPLES

- Starking Delicious Stark Golden Delicious
- Scarlet Staymared Winesap-Stark Dbl. Red. - New
- Jon-A-Red
- Stark RedGold-New
- Stark Dbl.Red Rome Beauty

PEACHES

- Burbank July ElbertaStark Early Elberta
- Starking Delicious—New Golden Early Bird—New Honeydew Hale—New

- Early White Giant-New
- Stark RedGold—New
 Stark LateGold—New

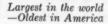
BRAND NEW STARK INTRODUCTIONS

- STARKING DELICIOUS PEAR U.S. Plant Patent 1044-Available in both Standard and Dwarf Trees. Giant size. Superior flavor. Smooth, melting, juicy, delicious—with no grit.
- STARK REDGOLD PEACH U. S. Palent 1329. A sensational new yellow-freestone profit-maker. An early-ripening hybrid of Hal-Berta Giant Peach.

 STARK LATEGOLD PEACH U. S. Plant Patent 1321. Large size. Delicious flavor. Yellow freestone. Ripe a week after Elberta. Set crop in 1955 when most other procedure from the procedure of the peach of the peaches frosted out.
- STARK SUMMER DELICIOUS APPLE U.S. Plant Patent 1422. A new dessert Delicious-type apple that is eating ripe three weeks or more ahead of Starking Delicious. Best summer apple we grow.
- · Also Starkrimson Strawberry and · Starking Black Giant Raspberry.

WRITE for latest catalog and commercial prices to customers on Stark Certified "Virus Free" Fruit Trees. Address:

RK BRO'S NURSERIES & ORCHARDS CO.



Dept. 167 — Louisiana, Mo.



NEW TEW "Market Maker" DOUBLE BELT BAGGER



Exclusive multi-V-belt carriers for produce cannot run to side—rarely need adjustment. Rubber discs between V-Belts at discharge point reduce "roll-over" after V belts stop.—Produces a ccurate weights in scoop. Special scale and accurate over-under indicator insures correct weights and long life operation. Electric clutch — no solenoids used.

used. Available in double head (shown) or single head.



Highly efficient brusher available in

TEW MANUFACTURING CORP.

Orchardkraft
Air-Power PRUNER

Sizes for all your work from the SMALLEST CUTS that you would make with a HAND SHEAR to the largest cuts that you would make with ANY SHEAR.
OUR ORCHARDKRAFT AIR POWERED RUNERS are designed for Fruit Growers, by people who have supplied Fruit Growers' needs for over 50 years. Write for circular.
John C. Bacon Corp., Gasport, N.Y.

LOW COST GREENHOUSE

Plastic greenhouse is easy to construct and maintain too



Many growers have duplicated this 18x84-foot plastic greenhouse at the University of Kentucky's Agricultural Experiment Station with a 25 cent set of plans available from AMERICAN FRUIT GROWER. Big reason for its popularity: a mere \$200 cest in materials compared with \$4,000 for a similar house of glass. What's more, the plastic greenhouse costs half as much to heat.

Photos courtesy Bakelite Company



This phote was taken inside the plastic greenhouse at Kentucky. Lettuce, beans, romatoes, eggplant, peppers, beets, cobbage, and 10 varieties of flowers were grown successfully all year round. Tomatoes planted last spring yielded about one-half pound more per plant than those planted in glass houses. Water for the plants is wellconserved by the polyethylene film, and the house is ventilated by vents in side walls. Propane or butane heaters were used to heat the greenhouse. The

Complete Corkboard

INSULATION SERVICE

From engineering design to complete erection, United Cork Companies offers complete service on B.B. (Block-Baked) Corkboard through its chain of branch offices from coast to coast.

Each installation of United Cork Companies' B.B. Corkboard is specifically planned for the requirements of the individual fruit storage area. And each installation is followed up by United Cork Companies' engineers to assure full satisfaction to the fruit grower.

You are invited to discuss your low-temperature insulation requirements with us.

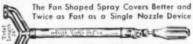
UNITED CORK COMPANIES

6 Central Avenue

KEARNY, NEW JERSEY

BRANCH OFFICES IN PRINCIPAL CITIES

New Boyce Double Spray Gun



Complete Line of Orchard Spray Accessories SPRAYER SUPPLY MFG. CO. Grand Rapids, Mich.

When writing advertisers, be sure to mention AMERICAN FRUIT GROWER

POLLEN

Recent publication Circular No. 67 Nova Scotia: "When processed pollen is supplied (by beehive insert), the presence or absence of pollinizing varieties is of no importance."

POLLINATE FOR PROF!T
We prepare Pollens for Use by all Methods:

Help the Bees to Help You Produce a Full Crop

We now have four improved pole dusters

Phone or write us for information and prices



- HAND BRUSH
- · WAND
- HAND DUSTER
- · AIRPLANE
- BEEHIVE INSERTS

LEO C. ANTLES

B.S., M.S. (Successful Orchardist)

FRUIT TREE POLLEN SUPPLIES CO.

P.O. BOX 1243-WENATCHEE, WASHINGTON-PHONES: 2-2905 or 2-6052

THE **QUESTION BOX**

Don't be perplexed! Send us your questions—i matter how big or small. A three-cent stamp w bring you an early reply. Address: The Questi Box, AMERICAN FRUIT GROWER, Willoughb Ohio.

WANTS MAGGOT TRAPS

Where can I obtain the McPhail magget traps mentioned in your August Question Box?—Cali-

The McPhail maggot traps are manufactured by the Kimble Glass Works, Vineland, N. J. They are not a standard producland, N. J. They are not a standard produc-tion, however, and are obtainable only on special order. The Entomology Branch, USDA, Agricultural Research Service, Beltsville, Md., can furnish specifications for anyone who has need for a sufficient number to justify making up an order.

FERTILIZER VALUE OF APPLE POMACE

Can the residue from apple cider factories be used for fertilizer?—Pennsylvania.

Apple pomace does not have a high fertilizer value. Its greatest benefit would be as a soil conditioner because of the high fiber content. The excess acidity could be corrected by the addition of lime.

PREVENT FREEZING IN SPRAY TANK

What can I use in my wooden spray tank to prevent the water from freezing during winter storage?—Connecticut.

Calcium chloride at the rate of 160 pounds to 100 gallons of water is recommended by the John Bean Co. in order to protect down to —1° F., or 192 pounds to protect to —14° F., or 230 pounds to protect to —32° F.

ACEROLA CHERRY

I have read about the Acerola cherry of Puerto Rico which has a high vitamin C content. Can you tell me whether any mursery in the U.S. has this cherry for sale?—Jowa

The name "Acerola" is used in Puerto Rico but in the U. S. this cherry is known as Barbados. The best source is Newcomb Nursery, Route 2, Box 519, Homestead, Fla. Mr. Newcomb has both a sweet and tart variety.

THOMPSON #5 GRAPE

I have a Thompson No. 5 grape that looks much like a Concord and ripens at about the same time. I'd like to know where and when it originated and its parentage.—Pennsylvania.

The Thompson No. 5 is an old variety that originated about 1885 among a group of seedings started by Joseph T. Thompson, of Oneida, N. Y. It is a seedling of Worden, and the fruit is somewhat of the same

MANGO INTEREST

We grow a considerable quantity of mangos and I would appreciate any information which you might have concerning mangos and possibly the name and address of someone to whom we might write in India.—Florida.

We are sending our reader an item on mangos from *The Indian Journal of Horticulture*, Volume 11, No. 3, September, 1954, by R. H. Singh, Government Horticultural Research Station, Saharanpur, U.P., India. Another informed person on mangoes you may wish to write is Dr. S. Krishnamurthi, Head, Department of Agriculture, Annamalai University, An-namalainagar, Chidanbaram, South India.

I should like specific instructions on culture of Muscodine grape vines (Bronze Scuppernong).— Georgia,

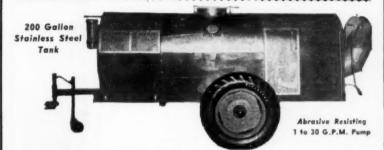
A copy of a bulletin by the Georgia Ex-periment Station, Athens, Ga., entitled "The Muscadine Grape Vineyard," is being sent our reader.

DECEMBER. 1954

THE PROOF IS IN THE USE

A New York State Apple Grower Reports

I picked almost 20,000 Bu. of apples this year that graded out 92% EXTRA FANCY with LESS than 2% culls. The "Buffalo Turbine 200 Gal. Streamliner" has cut my spraying time over half and I am only using 1/8 the water I used before.



For Spraying Dilute, Semi-Concentrates or Concentrates The 200 Gallon Stainless Streamliner

The new "Stainless Steel Streamliner" with a 200 gallon stainless steel tank will give years of trouble free service at LOW initial cost. "ONE MAN OPERATION", light in weight (Less than 2000 lbs.). This combination dilute, semi-concentrate and concentrate sprayer is acclaimed as the outstanding sprayer of 1957. Other features include dual purpose for both orckards and row crops, adjustable axle as to height and width, and a choice of two special pumps for either dilute or high concentrate application.

An Illinois Fruit Grower Reports

We have just picked another almost 100% clean crop, doing all our spraying with the five 100 Gal. Buffalo Sprayers we have in our operation, and records indicate substantial savings in time, labor, material and maintenance costs.



The 100 Gallon Combination

Buffalo Turbine Sprayer and Duster

Large enough for the big grower and small enough for the small grower. The "Buffalo Turbine" combination Sprayer and Duster comes with a stainless steel 100 gallon tank, skid or trailer mounted. Designed for orchard or row crop spraying or dusting.

Only Buffalo Turbine Offers You All These 7 Advantages

BUFFALO TURBINE

AGRICULTURAL EQUIPMENT CO. INC.

GOWANDA, NEW YORK

- 1. Practically No Upkeep design with few moving parts.
 - Very simple design with 1.

 2. Light Weight Can be handled with light tractor—only 1/10th
- liquid required.

 3. Greater Coverage

 Turbulent air atomizes spray or dust—gives
- 4. Less Material per Tree
- 5. Less Labor
 One man can operate and cover more trees
- 6. Completely Universal
- 7. Low First Cost



WILLER-ROBINSON CO.

tioneer and World eader in Air Powered rimming and Pruning quipment

NOW! Famous

Manufactured Exclusively By

MAXIMUM PROTECTION

SQUIRES MFG. CO.

FULLY COLLAPSIBLE

TO HANDLE EASIER TO STACK

GIVES FRUIT



*MAXIMUM CROPS

It takes POLLEN to Develop maximum fruit crops.

It takes POLLEN to insure quality fruit.

GOOD ORCHARD PRACTICE

POLLEN is as essential to increased paying production as Fertilizer and insecticides.

POLLEN belongs in your orchard budget.

POLLEN FOR ALL APPLICA-TIONS

We prepare POLLEN for your preferred method of application.

Excellent results reported from pollen applied by the EZ pollen applicator (shown here) and application by hand brush, blower type sprayer, or airplane.







Mina T. Girman Best Quality Pollen

WENATCHEE Phone NOrmandy 2-2459

126 Highland Ave. P.O. Box 996 CHELAN, WASH.

COMPOUND LEVER TREE PRUNERS





B. M. LAWRENCE & CO.

Don't Take a Chance



A new, lightweight respirator has just been approved by the USDA. Although quite inexpensive, it gives protection against virtually every chemical we growers must use, including the dangerous organic phosphates. Write to Bill Hynes, American Optical Company, Southbridge, Mass

No Mildew



Ten years ago the rooms of the apple storage at Pennsylvania State University were treated with Cuprinol wood preservative, and there has been no mildew since. No whitewashing or painting has been required either. Widely used by fruit growers, Cuprinol is nontoxic and won't harm fruit. Application can be by brush, spray, or dip, and it can be painted over easily. Write F. D. Houghton, Cellu-san Division, 8 Wood St., Simsbury, Conn.

'57 Power Giants



The new Dodge trucks have the eye appeal of the new model cars. Besides the pick-up shown above, others are offered with 3725- and 4875-pound payload capacities. The new line includes two types Milan, Mich. Phone HEmlock 2-5411 244 California Street San Francisco 11, Calif. of motor—the 204 h.p. Power-Dome or

- CHAIN SAW
- FRUIT JUICER

the 120 h.p. economy six. Power steering, power brakes, and push-button driving controls with 3-speed automatic transmissions are available on all truck models. Write W. L. Kessinger, Dodge Motor Truck Co., 2751 E. Jefferson, Detroit 7, Mich.

New-Better-Faster

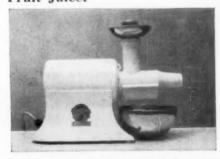


Last week I used a new chain saw which did about twice the work of our old saw. Easier to use, it has positive power which means there is no slippage. Low in price, it uses about half the gas of any saw I've ever used, and is much lighter and better balanced. Write Dave Hoff, Hoffco, Inc., 416 No. 8th St., Richmond, Ind., for full details.

When writing advertisers
please mention

AMERICAN FRUIT GROWER

Fruit Juicer



Out in California I tasted the most delicious fruit juice—made at home from tree-ripened fruit. Low in cost, the handsome Champion Juicer will add zest and vitamins to your diet. Growers with roadside stands report that on-the-spot juicing is a hit with customers. Write Bill Woock, Plastaket Manufacturing Co., 639 E. Lockeford St., Lodi, Calif.

DECEMBER, 1956

a

105



Plant C&O

Grower Approved Varieties
BETTER VARIETIES

Proven to Bring You Greater Profits

"Our Improved Blaxtayman #201 were absolutely beautiful last fall—I don't remember ever seeing Stayman any better" reports R. Samuel Dillon Jr., of the famous Dillon Orchards, Hancock, Maryland.



BLACKJON — BLACKMACK Imp. BLAXTAYMAN #201 Imp. SEEANDO WINESAP SEEANDO RED ROME #262 SHOTWELL DELICIOUS

C & O Exclusives

These varieties available from no other source



NERO RED ROME (U.S. Pat. No. 1414)



ursery

P. O. Box 116

Wenatchee, Wash.

Cut Labor Costs in Half!

"STEEL SQUIRREL" LETS ONE MAN DO THE WORK OF TWO!

Owners say one man on a BMC "Steel Squirrel" can outwork two and even three with ladders! Operator works with both hands — prunes, picks, wires or thins practically without interruption! Controlled by foot pedals, the "Squirrel" turns on a dime, raises or lowers at a touch. Built-in compressor powers air tools. Use it anywhere, in any type of orchard.

See your dealer for details or use coupon below

BLACKWELDER	MANUFACTURING	CO.
Pio V	ista California	

Please send me more information on the STEEL SQUIRREL.

Name.....

Address.....

State___

* Work 22' Trees
Without
Ladders!

* Fewer
Workers,
Faster WorkMore Profits!

★ Often Pays For Itself in one Season!



Made by Blackwelder, maker of the famous Marbeet Harvester

OF EXPERIENCE. ENGINEERING and MECHANICAL SKILL STAND BEHIND EVERY

ORCHARD SPRAYER LEADS THE FIELD FOR EFFICIENCY

LOW FIRST COST LOW OPERATING COST GREATER PERFORMANCE ABUNDANT POWER

> FOUR GREAT MODELS 300 - 400 - 500 GAL. CAP.

NOW YOU CAN GET REAL Frost Protection

WITH THE PROVEN

AIR-O-FAN

TRANSPORT

ORCHARD HEATER



The Answer To Your Frost Protection Problem AIRVOLUME - 2 - 4 FT. FANS HEAT - 2,000,000 to 10,000,000 B.T.U. POWER - Ford Y-Block-8 cy. - 160 H.P. SEND NOW FOR BROCHURES

Distributed Nationally By

KRAUS & NOONAN

P. O. BOX 977 . MODESTO, CALIF.

PACIFIC NEWS

OREGON

Garoian Goes to Wisconsin

Leon Garoian, Clackamas County agent specializing in horticulture, has resigned and will go to the University of Wisconsin as state extension specialist in fruits and vegetables.

Leon, or Lee as he is generally called, helped develop the Five Ton Strawberry Club. He served as secretary of the Oregon-Washington Strawberry Council from its inception

The Oregon-Washington Strawocco, Council during its fall meeting re-elected Marvin VanCleave, Salem strawberry grower, president. Ronald Burnett, Portland, was elected vice-president; Don Rasmussen, Salem, secretary; and Harold Bushue, Gresham, treasurer.

The council, sponsor of the Five Ton Club, discussed possibility of a program to finance expanding and accelerated research on strawberry production. It was decided to explore the matter further with the raw products committee of the Northwest Canners and Freezers Association to determine what phases of research should have pri-

The Nut Story

It may pay to leave walnuts in their shells this year, Glenn Hansberry, manager of the Salem Nut Growers Co-operative, told his membership this fall. Most growers, he stated, will realize a better return without half the work if they sell in the shell

A lot of walnut meats were supplied last year—more than were used. Consequently the price dropped. In the Willamette Valley the drop was approximately 33%. Walnut harvest in the Willamette Valley

was very light this year due to last win-

ter's unfavorable weather.

The filbert crop was also light, but the price to the grower is much better this year than in 1955.

New Blackberry

A promising new blackberry variety, now known as No. 928, is being readied for release by Oregon State College Ex-periment Station. Developed by George Waldo, USDA horticulturist, the new variety is a cross between the Chehalem and the Olallie blackberry varieties. Plants will be available to commercial growers in

The berry is said to be fine in flavor, firmness, and good color. In frozen pack quality tests, it has rated higher than the Boysen blackberry. It also rates high in pie baking tests and holds promise for use in ice cream.

Yield tests have shown that up to 7 tons per acre can be obtained, thus far out-producing other Oregon blackberry varieties.

—Harold and Lillie Larsen.

WASHINGTON

"Twin" Award

The "Conservation Farmer of the Year" in the Wenatchee-Entiat Soil Conservation district this year is "twins." Harold and Gary Aasen, twin brothers who operate an orchard in Entiat, have been honored as top conservationists.

The Aasens are newcomers to the fruit industry, having purchased their 10-acre



A variety discovered and introduced by Allen Martin at Winters, California. A beautiful large, yellow fleshed variety, ripening about a week after Elberta. Flesh quite firm, delicious flavor, small seed, freezes and cans well, excellent for shipping. Trees are available for this season's planting. Write for quotations. Patent No. 930.

Other nursery contacts invited.

FOWLER NURSERIES

Newcastle, California

Office: Lincoln Mission 5-2122 Residence: Newcastle 119

Planning to order books on fruit growing and allied subjects? Take advantage of our 10%discount on two or more books by sending your order BEFORE January 31, 1957. Address Readers' Service Department, AMERICAN FRUIT GROWER, Willoughby, Ohio, and en-close check or money order.

Buy Good Used Heaters Now

... while available as result of subdivisions of Southern Calif. Orange groves. Contact

California Heater Co. 1513 W. 2nd St., Pomona, California

The fastest cutting saws

Saws for all orchard uses



THE FANNO NO. 2 Made to fill the needs of the vineyard grower and orchardist. The most versatile of folding saws, 9" cutting edge. 9½" hardwood handle. 7 pts. per inch lance teeth. 19 ga. steel.

Write for our FREE catalog



Fanno Saw Works

P.O. BOX 527 H · CHICO, CALIF.

orchard in 1950. It consists of 90% apples -largely in standard and Red Deliciousand 10% in cherries, peaches, and pears.

Their sprinkler irrigation system, installed in 1952, was SCS engineered, and although they have followed conservation practices on their farm buildings, the chief accomplishment and no doubt the one that earned them the award is their fine cover crop. They have established a cover that controls erosion, conserves plant nutrients, improves fertility, improves water penetra-tion, and controls milkweed and ragweed. By clipping and rotobeating this cover,

they are steadily building up residues in soil.

The selection of top conservationist is sponsored by the Wenatchee Junior Chamber of Commerce.

Running a close second was Glenn Wells, of Cashmere, who has done an excellent conservation job on his 25-acre orchard.

Longer Life for Pears

Pears packed in polyethylene bags not only look good but their keeping qualities are prolonged six to eight weeks, reports O. B. Blair, general manager of the Peshastin Fruit Growers Association, largest pear packers in the area,

This is the third year that the Peshastin warehouse has packed pears in bags. The operation is a bit slower and costs an additional 8 cents each for the bags plus an additional half cent a box to the packer for the extra handling. More employees are needed, too, for bag packing but "It's reached a point where pears sold after January 1 almost have to be in bags to be accepted." Mr. Blair states.

Air is taken from the bags by use of a vacuum cleaner suspended from the ceiling. Not all the air is removed—experience has proved that this dries out the fruit. Just enough air is removed so that the bags won't break under the pressure of the boxlidding machine.

CALIFORNIA

New Orchards Planned

Holding an option on 470 acres of land at the confluence of the Feather and Bear Rivers, a new agricultural development organization, the Bear River Products Company, has been formed in Yuba County.

The company has plans for the development of peach, plum, prune, and walnut

Gabriel Alvarez, Tracy farmer, will di-Raiph L. Jensen, Oakland, president and general manager; Gordon T. Stromer, Marysville, vice-president and director; Richard F. Desmond, Sacramento attorney, secretary.

Big Prune Crop

Total tonnage for the California 1956 prune crop, estimated at 180,000 tons by the State Reporting Service, is expected to exceed that figure, according to Elmer Berka, a director of the California Prune & Apricot Association.

Prune growers in all districts noted that this year the prunes were smaller and lacked the sugar content to dry into good quality, said Mr. Berka.

Dryaway was another disappointing fac-tor. In Sonoma County, where it was less than in some other districts, dryaway was 2.63 to one, with some lots drying more than three to one.

Cherry Pack

According to the Canners League of California the 1956 pack of California sweet cherries was equivalent to 442,458 cases as compared with 515,601 cases last year.—Neale Leslic.





MARVIN MULTI-PURPOSE LANDPLANE®

LANDPLANE - for easier, quicker harvesting!

Get ready for more efficient mechanical nut harvesting with the Marvin Multi-Purpose LANDPLANE. Only LANDPLANE puts that supersmooth finish on your orchard ground that saves you time and money at harvest time. The roller packs the ground just right. This new model Multi-Purpose is 30" high overall; easier to operate under the trees. Makes 180° turns within 24 ft. tree rows. See your LANDPLANE dealer today; write for FREE literature on land leveling.

SOIL REMOVED

SOIL DEPOSITED HERE

MARVIN LANDPLANE COMPANY P. O. BOX 209A, WOODLAND, CALIFORNIA, U.S.A.



- **BUD SELECTION**
- TRUE-TO-NAME VARIETIES
- PROVED and PROFITABLE

The Greening Nursery Company, one of the leaders in bud selection, have for over 100 years given all growers the benefit of their research and improved strains which mean greater orchard profits.

AGENTS

Earn extra money, full or part time. It's pleasant and profitable to sell Greening nursery stock. Write us today for all of the details.



Send 10c to cover post-age for the Greening 100 - year anniversary 50-page color catalog.

THE GREENING NURSERY CO.

P. O. Box 805, Monroe, Michigan

Hoffco makes Clearing FAST-EASY



It clears more small trees, dense brush, weeds or grass, easier, and 4 times faster and better than any other method. Yes, that's the Hoffco Power Unit. The original portable power unit.

portable power unit.

Now, you have a choice of five cutting attachments (Brushette shown). No more stooping or bending. With Hoffice yee stand or walk upright in perfect safety.

If you have a felling or bucking job on small trees for fence posts, pulpwood, or, if you are cutting Christmas trees, Hoffice takes the hard labor right out of the job. Any of the attachments can be changed in a jiffy.

Send name and address for complete de-

Send name and address for complete de-tails.

Name	
Address	
City	State

RICHMOND Hoffco, inc. Indiana

OPPORTUNITY ADS

Only 25c a word for one-time insertion; 20c a word for two-time insertion; 15c a word for four-time insertion—CASH WITH ORDER. Count each initial and whole number as one word. Copy must be in the first of the month preceding date of issue. Address: AMERICAN FRUIT GROWER, Willaughby, Ohio

AGENTS WANTED

"FOG.STOP" WINDSHIELD CLOTH. IN-stantly removes blurry Mist, Frost, Sleet, Snow. Stops windshield fogging. Samples sent on trial. KRISTEE CO., Dept. 195, Akron 8, Ohio.

ROOKS

THE HOW TO BOOK ON STRAWBERRIES.
The layman's primer, the professional's reference
and everyone's factual guide to more and better
strawherries. \$1.50. AMERICAN FRUIT
GROWER, Box 159, Willoughby, Ohio. HOW-TO BOOK ON STRAWBERRIES ayman's primer, the professional's reference

BERRY BOOK: "THIRTY YEARS OF BER-ries." Raspberries and Strawberries. 84 pages, price \$1.00 Ppaid. ROY TURNER, 1525 S. Liv-ingston St., Peoria, Ill.

BUSINESS OPPORTUNITIES

\$100.00 WEEKLY RAISING EARTHWORMS Free plan reveals how! OAKHAVEN-25, Cedat Hill, Texas.

FOR SALE-EQUIPMENT & SUPPLIES

BUY SURPLUS DIRECT FROM GOVERN ment at tremendous savings, farm tools marking

ment at tremendous savings, farm tools, machinery, truck, jeep, tractor, power units, hundreds others listed in our bulletin. Price \$1.00, GOV-ERNMENT SURPLUS SALES, Box 169ARG, East Hartford 8, Conn.
CIDER & WINE PRESSES, HAND AND HY-draulic, new and rebuilt. Repairs and supplies, clarifiers and filters, pasteurizers and bottling equipment. Write for supply catalogue. W. G. RUNKLES MACHINERY CO., 185 Oakland St., Trenton, N.J.
GRADING MACHINE CUTTER—USED-double roll table—four sizes, capacity 400 bushels per day, \$195.00, S. B. CROWELL, JR., Edgemont, Delaware County, Pennsylvania.
1955 MODEL 36 BEAN SPEED SPRAYER.
1953 MODEL 36 BEAN SPEED SPRAYER.
1953 MODEL, 36 BEAN SPEED SPRAYER.
1954 MODEL, 36 BEAN SPEED SPRAYER.
1955 MODEL, 36 BEAN SPEED SPRAYER.
1957 MODEL, 36 BEAN SPEED SPRAYER.
1958 MODEL, 36 BEAN SPEED SPRAYER.

FOR SALE-REAL ESTATE

SAVE. BUY DIRECT FROM GOVERNMENT. Surplus farms, land, homes, etc. Listings \$1.00. BUREAU BOX, 169AMG, East Hartford 8,

MISCELLANEOUS

WHY HAVE GRAY HAIR? GUARANTEED liquid restores natural color in days. Six month supply \$1.50 postpaid. FENDRICKS, 114 North Sixth Street, Allentown, Pennsylvania.

25,000 DWARF APPLE TREES

for Planting Next Spring

Hardy, northern grown 1-year old trees. Grafted on Malling Stocks No. II, IV, VII and IX. Guaranteed free from insect pests or plant disease. Backed by more than 100 years of Leuthardt family experience in Dwarf Fruit Trees. Send for prices. State your needs, soil conditions and varieties desired, to eliminate any possible risk in choosing proper understock.

HENRY LEUTHARDT Port Chester

New York

PECANS—NEW CROP—U.S. # 1—UNshelled or meats—Cater to Roadside Stands—
Priced and packaged for quick resale. Individual
orders filled. B & B PECAN CO., Route 1, Box
232, Fairboye, Alabama.
BUILDINGS—PRE-FAB, COMBINATION

232, Fairhope, Alabama.

BUILDINGS — PRE-FAB, COMBINATION steel and wood. Clear span widths of 20, 24, 30, 40, 50, 60 foot. Every detail simplified to insure easy erection, Farm, commercial or industrial use. Write for prices. Give approximate size, WAYNE R. WYANT, representative. New Bethlehem, Pa. BOOTS — HIGHGRADE FANCY WESTERN style made to measure—catalog. CRICHET BOOT COMPANY, El Paso, Texas.

500 GÜMMED LABELS PRINTED WITH your name and address—65c postpaid. ART-PRINT, 1415 Jefferson, Sheboygan 11, Wisconsin.

OF INTEREST TO WOMEN

EARN \$50.00 FAST SEWING OUR PRECUT products. Information 3c. THOMPSON'S, Logan-ville 41, Wisconsin. 100 SPOOLS OF THREAD \$1.00. 90 different colors. CONNECTICUT THREAD PRODUCTS, 131 Greenwood St., Dept. 1-A, East Hartford 8, Conn.

ORCHARD FOR SALE

60 ACRES. 27 ACRES APPLES, 16 ACRES grapes. Modern house and cold storage. C. E. SCOULLER, R.D. No. 4, North East, Pa. 52 ACRES, ALL PRODUCING, CHERRIES, Prunes, Pears. Vineyard yielded 157 tons. 3 modern houses. Barn. Processing contracts for all crops. On U. S. Route 20. CARLTON LUKE, R. D. No. 1, North East, Pa.

100 ACRES—MAIN FINGER LAKES HIGHWAY. 70 apples. 14 cherries. Roadside market, Storage buildings. Modern home. Details from H. K. DRAKE, Ithaca, N. V.

PATENT ATTORNEYS

INVENTORS! WHEN YOU ARE SATISFIED that you have invented something of value, write me, without obligation, for information as to what steps you should take to secure a patent. Write PATRICK D. BEAVERS, registered patent atty., 813 Columbian Bldg., Washington 1, D. C.

TRADE MARKS

NATIONAL TRADE MARK COMPANY, Munsey Building, Washington 4, D.C.

WANTED-EQUIPMENT AND SUPPLIES

WANTED—ORCHARD TRACTOR, LATE model, top condition, able to pull Speedsprayer. Cash. HENRY HART, Noxon Road, Pough-keepsie, N.Y.

Are YOU a Nursery Salesman?

Add to your income by selling AMERI-CAN FRUIT GROWER. It's a logical combination, for AMERICAN FRUIT GROWER will help your customers get the best results from the nursery stock you sell them.

Write today for our liberal, nursery agents' plan. Address:

EDWARD MEISTER, Circulation Manager

AMERICAN FRUIT GROWER

Willoughby, Ohio

STATE NEWS

(Continued from page 12)

"for leadership in advancing fruit growing and for outstanding contributions to the growth and welfare of horticulture and community organizations."

community organizations."

All officers of the horticultural society were re-elected during the meeting, as follows: Arthur Bassett, Jr., Baraboo, president; Dawson Hauser, Bayfield, vice president; H. L. Rahmlow, Madison, secretary; and E. L. Chambers, Madison, treasurer.—

H. L. Rahmlow, Sec'y, Madison.

Camp to Retire; Reitz Appointed

FLORIDA-Dr. A. F. Camp, vice-director in charge of the Citrus Experiment Station at Lake Alfred for the past 20 years, plans to retire December 31. His successor will be Dr. Herman J. Reitz, present horticulturist with the citrus sta-

Dr. Camp came to Florida in 1923 as assistant plant pathologist with the State



A PRUNING PROBLEM A PRUNING PRUDILEM
Here's the way the Cortland apple tree
on page 15 looked after pruning. All unnecessary branches were cleared out, using
a saw on the larger branches and clippers
on the smaller ones. A good job, we'd say.
How did your "pencil pruning" compare?

Plant Board and Experiment Station. In 1927 he was made head of the experiment station's horticulture department. Since station's horticulture department. Since 1936, under his leadership, the station has developed into one of the most foremost

citrus research institutions in the world.

Dr. Reitz is a graduate of Kansas State
College, with advanced degrees from Ohio
State University. He joined the citrus station staff in 1946. Beginning January 1
he will be horticulturist in charge of the station.—J. Franci Editor, Gainesville. Francis Cooper, Extension

ILLINOIS-The Roy Newman Orchard of Martinsville was judged the winner of the annual "95% Clean Apple Club" com-petition, scoring an almost perfect record

with 99.66% clean fruit.

Leonard Flamm, 1st vice-president of the Southern Illinois Horticultural Society. passed away recently. Mr. Flamm was an earnest worker for improvement in the fruit industry.—Harold J. Hartley, Sec'y, Ill. State Hort. Society, Carbondale.



Nursery Co.

Established 1900 Decherd, Tennessee

ER 50 YEARS EXPERIENCE GROWING FRUIT TREES FOR COMMERCIAL ORCHARDISTS. WRITE FOR CURRENT PRICE LIST

LOW AS 20c

TENNESSEE NURSERY CO., BOX 4, CLEVELAND, TENNESSEE

DEPENDABLE FRUIT AND NUT TREES. SMALL FRUITS, ORNAMENTALS, and GENERAL NURSERY STOCK, WRITE FOR FREE CATALOG.

CUMBERLAND VALLEY NURSERIES, Inc.

Dept. 101

McMinnville, Tenn.

T. B. West & Son

FRUIT TREES ORNAMENTAL SMALL FRUIT PLANTS TREES AND SHRUBS

Also Dwarfs in the Popular Varieties

PERRY, OHIO



STRAWBERRIES

are ideal family income projects. One-tenth aere yields 656—990 quarts. Allen's Berry Book Itells best varieties and How to Grow Them. Free copp. Write foldy. W. ALLEN COMPANY 105 West Evergreen Ave., Solisbury, Maryland

FINEST QUALITY FRUIT TREES

Largest grower of TRUE TO NAME trees for 72 years. HARRISONS' NURSERIES, Berlin, Maryland



TRAWBERRY PLANTS

J. H. SHIVERS, Bax A-565 Allen, Md.



Tyson Orchard Service and chemicals, FLORA DALE, PA.

Read the advertisements and remember advertisers will be glad to send you catalogs, specifications, and prices. Be sure to say you saw it in AMERICAN FRUIT

NEURITIS . SCIATICA . LUMBAGO . ARTHRITIS Why continue to suffer agonizing pains when usual remedies have failed. Learn how thousands have been successfully treated by an amazing new method which is fully explained in our New FREE Book. Don't wait. Write today. No obligation.

Excelsier institute. Bept. C 7100, Excelsier Spgs., Me.

RUPTURED

BE FREE FROM TRUSS SLAVERY

Now there is a new modern Non-Surgical treatment designed to permanently correct rupture. These Non-Surgical treatments are so certain, that a Lifetime Certificate of Assurance is given. Write today for our New FREE Book that gives facts that may save you painful and expensive surgery, and tells how non-surgically you may again work, live, play and love and enjoy life in the manner you desire. There is no obligation. Excelsior Hernia Clinic, Bept. F805, Excelsior Spgs., Mo.

YOUR GUIDE TO BETTER **FRUIT TREES**

WRITE TODAY

For Color Catalog

NEW AND EXCLUSIVE VARIETIES

Sold only by VAN WELL NURSERY

Red King (Brauns variety) Delicious U.S. Pat. No. 1411

Barkley Red Rome U.S. Pat. No. 1470

VAN WELL NURSERY **BOX 858**

WENATCHEE, WASH.

PEACHES

PEARS

APPLES

CHERRIES

APRICOTS

PLUMS

NECTARINES

NUT TREES

GRAPES

BERRIES

25 Estate Hemlock \$15.00

Canadian Hemlock

just like those on large estates. Hardy New Hampshire grown. 18 to 24 inches. Special this month. 25 for \$15.00. 100 for \$50.00 or 500 for \$200.00. The shipment at any later date.

Bob McGuire

R.F.D. 5

Johnson City, Tenn.

FREE BOOK

BIG YIELD

Dwarf Fruit Trees EACH-CHERRY-APPLE PEACH—CHERRY—Arr PEAR plus shrubs, shade trees, perennials, etc.

YOU'LL WANT these hardy Dwar Fruit Trees for huge harvests from a small land area, Orer a dozen varieties guaranteed to bear large julier fruit within the mursery. Send posteard now for new FIEE Catalog of hundreds of hardy fruit trees (dwarf and standard), grasse, berry shirubs, perennials, colors.

KELLY BROS. NURSERIES Dept. AFG-12 Dansville, N.Y.



STRAWBERRIES

Allen's 1957 Berry Book tells best-varieties for home and market, and how to grow them. Free copy. Write today. W. F. ALIEN COMPANY 105 West Evergreen Ave., Salisbury, Maryland



REE Neosko Nurseries Catalog



AGENTS

WANTED

Better Fruit Trees for 40 Years! Leading varieties of APPLE, PEACH, CHERRY, PLUM, GRAPE. Guaranteed hardy, disease resistant. Free Catalog. 48 pages of money-saving offers, fruits, roses, chade trees ornamenshade trees, ornamen-tals, etc.—shown in nat-ural color. Write today.

NEOSHO NURSERIES CO. Neosho Mo

Special

FRUIT GROWERS PRICE LIST Spring 1957

Hardy Climatized Fruit Trees and Berry Plants. Inspected & certified by State of Ohio to be free of disease. In-spected by Massachusetts Trueness-to-Name Inspec-tion Service. Write for FREE Price List. ALLEN'S Geneva, Ohio LEN'S NURSERIES &

SEED HOUSE

Box 96, Geneva, Ohio



DWARF FRUIT TREES

FOR COMPACT AREA AND EARLY YIELD Also full line of Fruit Trees, Berry Plants, Vines, Shrubs, Evergreens, Perennials, Write today for FREE CATALOG. WHITTEN NURSERIES, Bex 185. Bridgman, Mich.

. Fruit for Health .

Organized Labor and the Fruit Industry

"IN time of peace, prepare for war" is perhaps an overworked slogan. Nevertheless, it carries with it the useful thought that one should never be lulled into a false sense of security.

This thought was never more in need of being heard than now. The fruit is harvested. The bottleneck of the fruit industry has been passed. And so we easily settle into a complacent rut and feel that all is right with our world.

But it isn't. Just remember back to the sporadic outbreaks of strikes during the critical harvest and packing seasons of the last few years. Think of the pineapple strike of a few years back that played havoc with that industry. Or think of the strike efforts at Traverse City, Michigan, during the cherry harvest of 1956 when farm families broke the strike with their own volunteer help. Sooner or later we are brought face to face with the fact that organized labor is an effective force that is here to stay.

We have got to learn to live with organized labor—sooner or later. It need not consume us. It can be dealt with intelligently and effectively. There are commercial firms which specialize in labor relations. The fruit industry on the West Coast has found it profitable to employ such firms to handle complicated problems. Perhaps this is the pattern which growers in other areas must copy. At all events, it depends on successful, large, organized grower groups and co-operatives to meet organized labor at the council table.

Now is the time to think these things through—not when the perishable fruit of a new harvest is flooding the packing shed or the processing plant.

Don't Forget the Variety

THE keystone of the fruit industry is still the variety. It is the Concord grape, the Montmorency cherry, the Washington navel orange, the Delicious apple, the Bartlett pear, the Elberta peach, and the other famous varieties upon which the industry is based.

To be sure, there are problems of nutrition and irrigation, of insect and disease control, of mechanization, of handling and storage, and all the rest. Each one steps to the front from time to time to command attention. But in the final analysis the fact remains that none of these would be important if there were no varieties.

Fortunately there are plant breeders and nurserymen and devoted lovers of plants who are fascinated by the quest for something new and improved. The American Pomological Society, now in its 108th year, is working painstakingly to keep the variety in its proper and important place.

This is a word of encouragement and appreciation for their efforts.

Horticultural Societies

ONE of the important horticultural agencies in the United States is the horticultural society—national, state, region, county, and local. At just this time of year they take on new significance. Growers and associated interests gather together for one or more days to pool their knowledge and lay plans for the year ahead. Here is where ideas are born, crystallized, and put into action.

The men back of these organizations are the secretaries. They keep the records, they arrange the programs, they help shape policies. Sometimes, after 25 years of service, they receive a watch or a traveling bag or a silver service.

But no matter what, they keep on steadily building and doing, and the fruit industry is the beneficiary of their loyal and devoted services.

Fruit Growing is Such Fun!



Fruit Talk

Controlled atmosphere (CA) storage for apples is growing in the East. Especially suited for McIntosh, it's now proving excellent for Jonathan also.

The Kentucky State Horticultural Society celebrates its 100th anniversary this month.

A nematode that is beneficial to growers has been found by S. R. Dutky of the USDA. It acts like a microsyringe in introducing "blood poisoning" into the body cavities of many insects, resulting in their death.

The farm food marketing bill for Mr. and Mrs. USA is more than \$28 billion. Total profits of food marketing corporations are four times those of 1939, and labor costs have more than tripled.

History repeats itself. Writing in the Indianapolis Star 45 years ago (1911), A. D. Moffat, of Hartford City, Ind., deplored the shriveled and wrinkled fruit at the Purdue Fruit Exhibit in November due to a severe drought, saying, "It has convinced me that it will be impossible to raise fine apples without irrigating the entire crop during the entire crop making season."

Bailey and Gertsten of Massachusetts report that Epsom salts and dolomitic limestone are still the best materials for correcting magnesium deficiency in blueberries.

Shipped this fall from England to Kenya, Africa were 200 boxes of "extraspecially selected" Cox apples—quite a reversal of the usual order of things, and indicating again how much smaller and interdependent the world has become.

Pleading eloquently for co-operation in the fruit industry, Cecil C. Clark, president of the Washington Canning Pear Association, says, "It may sound brave to say 'I can take it,' but who wants a tombstone over an untimely grave with an epitaph, 'Here lies John Doe, a rugged individualist, who starved to death.'

A Northwest trade bulletin notes: "Cannery peach prices negotiated: the price of \$72 per ton for No. 1 and \$45 per ton for No. 2 plus hauling and services was established after negotiations of the directors of the Washington Freestone Peach Association and the processors. This bests last year's price by about \$17 per ton, and provides concrete evidence that negotiations based on realistic appraisals by both parties are possible and beneficial—beneficial to the grower, the processor, and the consumer."

According to C. L. Burkholder of Purdue University, the 1956 season was one in which peach varieties forgot their manners and proceeded to ripen when they pleased. For example, Jerseyland, Redhaven, Jubilee, Fairhaven, Halehaven, and Sullivan Early Elberta were being packed at the same time in the Dixie Company packing shed at Vincennes, Ind. —H. B. T.

Coming Next Month Seventh Annual Yearbook Issue featuring

- Reviews and Forecasts for Tree Fruits, Small Fruits, Grapes, Nuts
 Fruit Varieties Introduced in 1956
- Fruit Varieties Introduced in 1956 • Fruit Blossom and Harvest Queens



Polyethylene cover is laid with tractor over strawberry plants. Small perforations provide drainage.



After film is laid, slits are cut with a razor, and the plants pulled through. Berries rarely touch the soil.



Far greater percentage of crop can now be sold. Another use of polyethylene film is for an air-seal when fumigating for weed control.

Polyethylene mulch cover brings a big return

Film made of BAKELITE Brand Polyethylene is bringing bigger profits to more and more growers of vegetables and other crops, through greater yields or a higher percentage of marketable produce.

For example, the experience of the Ishibashi Brothers, Torrance, Calif., with strawberries: "We have been saving as much as 75 to 85 per cent of the normal berry loss experienced when crops are grown and harvested directly on the ground. In this particular case, one berry saved on each plant is enough to pay for the polyethylene. We get a bigger crop to market at just the time when prices are at their premium."

Polyethylene film used by Ishibashi Brothers is made by Extruders, Inc., Hawthorne, Cal.

DID YOU KNOW: Pipe made of BAKELITE Polyethylene pays off in profits when you install a bigger water system.

It pays to use materials made of



BAKELITE COMPANY, A Division of Union Carbide and Carbon Corporation 113 30 East 42nd Street, New York 17, N. Y.

The term BAKELITE and the Trefoil Symbol are registered trade-marks of UCC

Her Ahs' mean money in your pocket ...



when you spray with

CAPTAN 50-W

Consumers pay a handsome premium for "extra fancy" fruit, and Stauffer-Captan helps you get this extra profit. Seasons past have proved that Captan is an amazingly effective fungicide for many fruit diseases.

Get complete information on Captan now, while you have a "breather" during the winter months.

Ask your local dealer, or write...

STAUFFER CHEMICAL COMPANY

380 Madison Avenue, New York 17, N. Y.

Tampa • Omaha • Houston • San Francisco
Los Angeles • Weslaco • Lubbock • Harvey
North Little Rock • North Portland, Oregon

GROWERS

are getting these market plus-values . . . with Stauffer-Captan 50-W

- substantially increased yields of top-quality fruit!
- maximum disease control on a greater variety of fungi!
- · highly productive green foliage!
- · excellent finish and fruit color!
- improved storage quality!

CAPTAN 50-W is YOUR BEST CONTROL FOR...

APPLE... Scab, Brooks Fruit Spot, Bitter Rot, Botryosphaeria Rot, Black Rot.

PEACH... Brown Rot, Scab, Rhizopus Rot.

CHERRY...Leaf Spot, Brown Rot. STRAWBERRY...Botrytis Fruit Rot.

